

PATENT ATTORNEY DOCKET NO. VON KREISLER.022

EXHIBIT A

Amendment to the Specification

This Application is a national phase filing of co-pending International Application No. PCT/EP00/08381 filed August 28, 2000, which claims the benefit of that application under 35 U.S.C. § 120 and which also claims the benefit under 35 U.S.C. § 119 of German Application No. 119 40 605.7 filed August 27, 1999.

Claims as Amended

- 1. A method for the impregnation and treatment of articles selected from the group consisting of wood/timber and wood products, textiles and textile raw materials, plastics and rubbers, natural and mineral insulation and sealant materials, construction materials made of mineral and natural substances, filters, soils and fertilizers, animal-derived raw materials, paints, lubricants, adhesives, detergents and cleaning agents; comprising the step of
 - applying a composition to the surface of the article; and/or
 - incorporating said composition into said article;

wherein said composition comprises at least two GRAS (generally recognized as safe) flavoring agents, that are not solely cinnamic aldehyde or a mixture of cinnamic aldehyde and terpenes.

- 2. The method according to claim 1, wherein said GRAS flavoring agents are selected from (a) GRAS flavor alcohols or their derivatives, (b) polyphenol compounds, (c) GRAS flavor acids or their derivatives, (d) phenols or their derivatives, (e) esters, (f) terpenes, (g) acetals, (h) aldehydes and (i) essential oils.
- The method according to claim 1, wherein said composition comprises at least one GRAS flavor alcohol.
- 4. The method according to claim 3, wherein said composition comprises less than 50% by weight of an alcohol selected from the group consisting of ethanol, isopropanol or benzyl alcohol or a mixture of these alcohols.
- 5. The method according to claim 1, wherein said composition comprises at least one hydrophilic alcoholic GRAS flavoring agent and/or one hydrophilic non-alcoholic GRAS flavoring agent.

- 6. The method according to claim 5, wherein said composition further comprises benzyl alcohol and/or a polyphenol compound.
- 7. The method according to claim 1, wherein said composition comprises one or more GRAS flavor alcohols or their derivatives (a) and one or more flavoring agents selected from polyphenol compounds (b) and GRAS flavor acids or their derivatives (c).
- 8. The method according to claim 7, wherein said antimicrobial and/or antiparasitic composition comprises:

from 0.1 to 99% by weight of component (a);

from 0.01 to 25% by weight of component (b); and

from 0.01 to 70% by weight of component (c).

9. The method according to claim 7, wherein said GRAS flavor alcohol (a) is selected from the group consisting of:

benzyl alcohol, acetoin, ethyl alcohol, propyl alcohol, isopropyl alcohol, propylene glycol, glycerol, n-butyl alcohol, iso-butyl alcohol, hexyl alcohol, L-menthol, octyl alcohol, cinnamyl alcohol, α-methylbenzyl alcohol, heptyl alcohol, n-amyl alcohol, iso-amyl alcohol, anisalcohol, citronellol, n-decyl alcohol, geraniol, β,γ-hexenol, lauryl alcohol, linalool, nerolidol, nonadienol, nonyl alcohol, rhodinol, terpineol, borneol, clineol, anisole, cuminyl alcohol, 10-undecene-1-ol, 1-hexadecanol or their derivatives;

said polyphenol compound (b) is selected from the group consisting of: catechol, resorcinol, hydroquinone, phloroglucinol, pyrogallol, cyclohexane, resveratrol, usnic acid, acylpolyphenols, lignins, anthocyans, flavones, catechols, gallic acid derivatives, caffeic acid, flavonoids, derivatives of the mentioned polyphenols, and extracts from Camellia, Primula; and

said GRAS acid (c) is selected from the group consisting of:
acetic acid, aconitic acid, adipic acid, formic acid, malic acid, capronic acid,
hydrocinnamic acid, pelargonic acid, lactic acid, phenoxyacetic acid,
phenylacetic acid, valeric acid, iso-valeric acid, cinnamic acid, citric acid,
mandelic acid, tartaric acid, fumaric acid, tannic acid and their derivatives.

- 10. The method according to claim 7, wherein said composition comprises:
 - (a1) an aromatic GRAS flavor alcohol; and optionally
 - (a2) at least one additional GRAS flavor alcohol or its derivative; and
 - (b) at least one polyphenol compound; and optionally
 - (c) at least one GRAS acid or its derivative.
- 11. The method according to claim 10, wherein said composition comprises:

from 0.1 to 99% by weight of benzyl alcohol;

from 0.01 to 99.8% by weight of component (a2);

from 0.01 to 25% by weight of component (b); and

from 0.01 to 70% by weight of component (c).

- 12. The method according to claim10, wherein said composition comprises at least one polyphenol compound (b) as a necessary component and optionally at least one GRAS acid (c) or its derivative.
- 13. The method according to claim 7, wherein said composition comprises further GRAS flavoring agents selected from (d) phenols, (e) esters, (f) terpenes, (g) acetals, (h) aldehydes and (i) essential oils.
- 14. The method according to claim 13, wherein said composition comprises from 0.001 to 25% by weight of said further GRAS flavoring agents (d) to (i).
- 15. The method according to claim 13, wherein said further GRAS flavoring agents are phenols and/or essential oils.
- 16. The method according to claim 2, wherein said composition does not contain any derivatives of said GRAS flavoring agents.
- 17. The method according to claim 10, wherein said antimicrobial and/or antiparasitic composition comprises one or two GRAS flavor alcohols and at least one polyphenol compound.
- 18. The method according to claim 17, wherein said polyphenol compound is tannin.

- 19. The method according to claim 18, wherein said composition comprises from 0.1 to 98% by weight of benzyl alcohol and from 0.01 to 10% by weight of tannin.
- The method according to claim 1, wherein said composition comprises:(i) at least one lipophilic GRAS (generally recognized as safe) flavoring agent;
 - (ii) at least one hydrophilic GRAS flavoring agent.
- 21. The method according to claim 20, wherein said lipophilic GRAS flavoring agents are selected from (a_i) lipophilic GRAS flavor alcohols or their derivatives, (b) polyphenol compounds, (c_i) lipophilic GRAS flavor acids or their derivatives, (d) phenols or their derivatives, (e_i) lipophilic esters, (f) terpenes, (g) acetals, (h_i) lipophilic aldehydes and (i) essential oils.
- 22. The method according to claim 20, wherein said composition comprises at least two lipophilic GRAS flavoring agents.
- 23. The method according to claim 21, wherein said lipophilic GRAS flavor alcohols are selected from the group consisting of aromatic GRAS flavor alcohols, including benzyl alcohol, 2-phenylethanol, 1-phenylethanol, cinnamyl alcohol, hydrocinnamyl alcohol, 1-phenyl-1-propanol and anisalcohol, and aliphatic GRAS flavor alcohols, including n-butyl alcohol, iso-butyl alcohol, hexyl alcohol,

L-menthol, octyl alcohol, heptyl alcohol, n-amyl alcohol, iso-amyl alcohol, anisalcohol, citronellol, n-decyl alcohol, geraniol, β,γ-hexenol, lauryl alcohol, linalool, nerolidol, nonadienol, nonyl alcohol, rhodinol, terpineol, borneol, clineol, anisole, cuminyl alcohol, 10-undecene-1-ol and 1-hexadecanol and their derivatives.

- 24. The method according to claim 20, wherein said hydrophilic GRAS flavoring agent is selected from the group consisting of a hydrophilic alcoholic GRAS flavoring agent and a hydrophilic non-alcoholic GRAS flavoring agent, wherein said hydrophilic non-alcoholic GRAS flavoring agent is a hydrophilic organic GRAS flavor acid having from 1 to 15 carbon atoms or a physiological salt thereof, a hydrophilic acetate or a hydrophilic aldehyde.
- 25. The method according to claim 24, wherein said hydrophilic organic acid contains from 2 to 10 carbon atoms and is selected from the group consisting of acetic acid, aconitic acid, formic acid, malic acid, lactic acid, phenylacetic acid, citric acid, mandelic acid, tartaric acid, fumaric acid, tannic acid, hydrocinnamic acid and their physiological salts; said hydrophilic acetate is selected from the group consisting of allicin, triacetin, potassium acetate, sodium acetate and calcium acetate; and/or said hydrophilic aldehyde is selected from the group consisting of furfural, propionaldehyde and vanillin.

- 26. The method according to claim 24, wherein said composition comprises less than 50% by weight of benzyl alcohol or of a mixture of benzyl alcohol with ethanol and/or isopropanol.
- 27. The method according to claim 24, wherein said composition comprises two lipophilic GRAS flavor alcohols, but no benzyl alcohol and no polyphenol compounds.
- 28. The method according to claim 24, wherein said composition comprises benzyl alcohol and/or a polyphenol compound, but no further GRAS flavor alcohols.
- 29. The method according to claim 27, wherein said composition consists of a hydrophilic GRAS flavor acid.
- 30. The method according to claim 28, wherein said composition comprises:

 from 0.01 to 99% by weight of benzyl alcohol or polyphenol compounds; and
 from 0.01 to 50% by weight of hydrophilic non-alcoholic GRAS flavoring agents.
- The method according to claim 20, wherein said composition comprises:
 (A) one or more GRAS flavor alcohols (a) or their derivatives; and
 (B) one or more flavoring agents selected from polyphenol compounds (b) and
 lipophilic GRAS flavor acids or their derivatives (c).

- 32. The method according to claim 31, wherein said composition comprises: from 0.1 to 99% by weight of component (a); from 0.01 to 25% by weight of component (b); and from 0.01 to 70% by weight of component (c).
- 33. The method according to claim 31, wherein said composition comprises further GRAS flavoring agents selected from (d) phenols or their derivatives, (e_i) lipophilic esters, (f) terpenes, (g) acetals, (h_i) lipophilic aldehydes and (i) essential oils.
- 34. The method according to claim 31, wherein said polyphenol compound (b) is selected from the group consisting of: catechol, resorcinol, hydroquinone, phloroglucinol, pyrogallol, cyclohexane, resveratrol, usnic acid, acylpolyphenols, lignins, anthocyans, flavones, catechols, gallic acid derivatives, caffeic acid, flavonoids, derivatives of the mentioned polyphenols, and extracts from Camellia, Primula; and

said lipophilic GRAS acid (c) is selected from the group consisting of:
adipic acid, capronic acid, pelargonic acid, phenoxyacetic acid, valeric acid, isovaleric acid, cinnamic acid, mandelic acid and their derivatives.

- 35. The method according to claim 31, wherein component (A) of said composition comprises benzyl alcohol and optionally one or more further lipophilic GRAS flavor alcohols or their derivatives (a_i).
- 36. The method according to claim 35, wherein said composition comprises: from 0.1 to 99% by weight of benzyl alcohol; from 0.01 to 99.8% by weight of component (a_I); from 0.01 to 25% by weight of component (b); and from 0.01 to 70% by weight of component (c).
- The method according to claim 31, wherein component (B) of said composition comprises at least one polyphenol compound (b) and optionally (c) one or more GRAS acids or their derivatives.
- 38. The method according to claim 36, wherein said composition comprises at least one GRAS flavoring agent selected from the group consisting of phenols and their derivatives, lipophilic esters, terpenes, acetals, lipophilic aldehydes and essential oils.
- 39. The method according to claim 38, wherein said further GRAS flavoring agents are phenols and/or essential oils.

- 40. The method according to claim 21, wherein said composition does not contain any derivatives of said GRAS flavoring agents.
- 41. The method according to claim 34, wherein said composition comprises one or two lipophilic GRAS flavor alcohols (a_I) and at least one polyphenol compound (b).
- 42. The method according to claim 41, wherein said polyphenol compound (b) is tannin.
- 43. The method according to claim 42, wherein said composition comprises from 20 to 98% by weight of benzyl alcohol and from 0.01 to 10% by weight of tannin.
- 44. The method according to claim 1, wherein said composition comprises at least one additive selected from the group consisting of monohydric or polyhydric alcohols having from 2 to 10 carbon atoms, emulsifiers, stabilizers, antioxidants, preservatives, solvents and/or carriers.
- The method according to claim 1, wherein said composition contains GRAS flavoring agents.
- 46. The method according to claim 1, wherein said articles are selected from air filters, wool and cotton.

- 47. A method of treatment of the articles defined in claim 1 comprising the step of applying the composition as defined in claim 1 for the impregnation or surface treatment of the articles.
- 48. A method of treatment of the articles defined in claim 1 comprising the step of incorporating the composition as defined in claim 1 into said article.